#### NEW SPECIES OF GYPONA, GYPONINAE (HOMOPTERA: CICADELLIDAE) WITH DESCRIPTION OF A NEW SUBGENUS

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Abstract.—Seven new species of Gypona are described. Four new species, metalana, rubranura, decorana and quadra, are placed in the subgenus Gypona. Two new species, mocamba and platona, are placed in the subgenus Marganalana. One new species, colomella, is placed in a new subgenus Carnoseta.

A revisional study of *Gypona* was published by DeLong and Freytag (1964) including some 140 species and four subgenera. New species have been described since by DeLong and Martinson (1972), DeLong and Kolbe (1974, 1975), DeLong and Freytag (1975) and DeLong and Linnavuori (1977). Seven new species and a new subgenus are described in this paper.

## Gypona (Gypona) metalana DeLong, New Species Figs. 1–5

Description.—Length of male 8.5 mm, female unknown. Crown more than twice as wide at base between eyes as median length. Color brown, mostly with yellow spots surrounding ocelli and small yellow spots at base, behind ocelli. Pronotum dark brown to black except lateral margins and a diagonal yellowish line, each side, extending from basal margin, behind ocelli, to humeral angles. Scutellum black with bright yellow basal and apical angles. Forewings gray subhyaline, veins pale brown.

Male plates  $2\frac{1}{2} \times$  as long as broad, apices broadly rounded. Style broadened on apical  $\frac{1}{4}$ , lateral margins of broadened portion convexly rounded. Apex slightly concavely rounded. Aedeagus bearing a pair of lateral processes at  $\frac{3}{4}$  its length which extend basad along shaft for almost  $\frac{3}{4}$  length of shaft. The apical  $\frac{1}{4}$  of shaft slightly sclerotized, composed of a median shaftlike portion, which is blunt at apex, and giving rise to a slender, lateral, pointed spine on each side. Spines extend to apex or median portion. Pygofer broadly rounded apically.

Holotype.—&, Sonora, Mexico, 7 mi. S of Benjamin Hill, X-1-1968, at black light, E. L. Sleeper and F. L. Moore colls., in the DeLong collection, The Ohio State University.

Remarks.—Gypona metalana is placed in the subgenus Gypona and is related to G. melanota Spangberg, from which it can be separated by the apical portion of the aedeagus which is notched on each side at apex, producing two apical spines.

# Gypona (Gypona) rubranura DeLong, New Species Figs. 6–10

Description.—Length of male 8 mm, female unknown. Crown more than ½ as long at middle as basal width between eyes. Color, crown, pronotum and scutellum pale brown, forewings dark brown, often with yellow costal margins. Pygofer bright red.

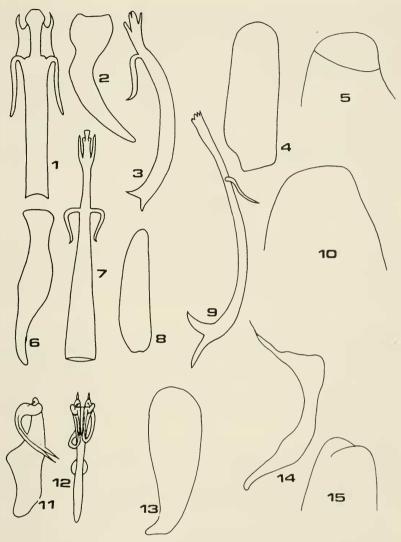
Male plates slender,  $3\frac{1}{2}\times$  as long as width at middle, apices narrow, rounded. Style broadened at middle and at truncate apex. Aedeagus elongate, apical  $\frac{1}{2}$  slender, a pair of short lateral processes,  $\frac{1}{6}\times$  length of shaft, arise at  $\frac{2}{3}$  length of shaft and extend laterally and basally along shaft. The apical  $\frac{1}{3}$  of shaft only slightly sclerotized, with blunt apex and bearing a pair of slender, lateral, subapical processes which are pointed and extend along shaft to its apex. Pygofer broadly rounded apically.

Types.—Holotype &, El Pilar, 1000 ft. el. Baja Calif. Mexico Sur. XI-6-1968, E. L. Sleeper and F. L. Moore colls., at black light. Paratypes (all from Baja California, Mexico): 6&, X-10-68, 2 mi. NW Eltriufa 1400 ft.; 5&, same except X-11-68, 7.5 mi. W 1600 ft. el.; 6& X-18-68, 3 mi. E of Burrera; 2&, X-8-68, 5.5 mi. SE Valle Perido, 1600 ft.; 1&, same except X-15-68, 2.5 mi. SE 2000 ft.; 3&, X-27-68, Casas Vigas, 800 ft. el.; 2&, X-30-68, 7 mi. W Santiago 1600 ft. el.; 2&, X-31-68, 3.5 mi. SW of San Bartolo, 1400 ft. el.; 1&, X-26-68, 6 mi. E. San Jose del Cabo, 400 ft. el.; 1&, X-29-68, El. Charro, 2.5 mi. SW Agra Caliente, 900 ft. el.; 1&, XI-3-68, 8 mi. SE of La Paz, 1000 ft el. Holotype and paratypes in DeLong Collection, The Ohio State University, paratypes in collection of E. L. Sleeper.

Remarks.—Gypona rubranura is placed in the subgenus Gypona and is related to G. extrema DeLong, from which it can be separated by the longer apical portion of the aedeagus beyond the apical processes.

# Gypona (Gypona) decorana DeLong, New Species Figs. 11–15

Description.—Length of male 9 mm, female unknown. Crown with thin margin, almost tiwce as wide at base between eyes as median length. Color, crown dark brown. Pronotum paler brown, scutellum dark brown. Forewings brown, veins of median and claval areas, dark brown.



Figs. 1–15. 1–5, Gypona metalana. 6–10, G. rubranura. 11–15, G. decorana. 1, 7, 12, Aedeagus ventrally. 2, 6, 14, Style laterally. 3, 9, 11, Aedeagus laterally. 4, 8, 13, Plate ventrally. 5, 10, 15, Pygofer laterally, apical portion.

Male genital plates more than twice as long as wide at middle, apices broadened, rounded. Style narrowed at  $\frac{2}{3}$  its length, broadened and rounded ventrally at middle then tapered to a narrow twisted apical portion which is notched on ventral margin at  $\frac{4}{5}$  its length. Aedeagal shaft short, narrowed

to a pointed apex. Two pairs of subapical processes arise near apex, and slightly basad to these, a long pair arises which extends dorsally, then curves basally and ventrally, and tapers to pointed apices. Apex of aedeagus divided dorsocaudally (Fig. 12).

Holotype.—&\delta, Ullnga, Par\u00e1, Brazil, XI-30-1961, J. and B. Bechyne, colls. Holotype in Museu de Zoologia da Universidade de S\u00e1o Paulo, Brazil.

Remarks.—Gypona decorana is placed in the subgenus Gypona. It is closely related to G. decorata (Fowler) but can be distinguished by the notched, apically twisted style, the shorter, broader aedeagus and its subapical processes which are broader basally and hide the shorter subapical processes which are beneath the longer pair.

# Gypona (Gypona) quadra DeLong, New Species Figs. 16–20

Description.—Length of male 14 mm, female unknown. Crown flat, foliaceous, ½ as long at middle as basal width between eyes. Color, crown, pronotum, and scutellum dull yellow. Margin of crown with a black line. A small black spot ½ length of pronotum, each side. Forewings brownish subhyaline, veins of costal area dark brown, remainder of wing veins pale brown.

Male genital plates  $3\times$  as long as broad at middle, apices narrowed, rounded. Style slightly narrowed subapically, apex blunt. Aedeagus with a pair of apical and a pair of subapical processes. The apical processes curve basally and extend almost to base of shaft. The subapical processes arise just basad to apical processes and extend basally and laterally about ½ length of apical processes. Pygofer with a small rounded process arising at dorsoapical margin.

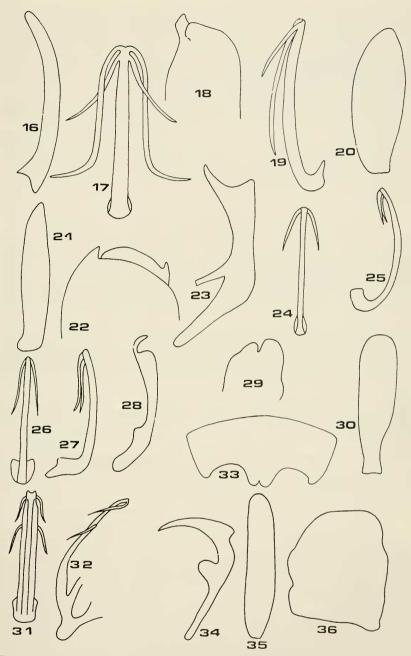
Holotype.—♂, Guajara Mu. Ananindeus, Pará, Brazil, I-1-65, Apol Sousa coll. Holotype in Museu de Zoologia da Universidade de São Paulo, Brazil.

Remarks.—Gypona quadra is placed in the subgenus Gypona and is closely related to G. secura DeLong and Freytag from which it can be separated by the longer apical and subapical aedeagal processes.

## Gypona (Marganalana) mocamba DeLong, New Species Figs. 21–25

Description.—Length of male 8.5 mm, female unknown. Crown broadly rounded, foliaceous, more than twice as wide at base between eyes as median length. Color dark green and black. Crown mostly black with dark green along anterior margin. Pronotum with anterior portion dull blackish gray, caudal ½ dark green. Scutellum blackish gray. Forewings subhyaline, tinted with green on claval area.

Male genital plates  $5 \times$  as long as median width, apices bluntly pointed. Style narrowed at middle, broadened and broadly rounded apically with a broad finger-like projection on dorsocaudal margin. Aedeagal shaft long,



Figs. 16–36. 16–20, *Gypona quadra*. 21–25, *G. mocamba*. 26–30, *G. platona*. 31–36, *G. colomella*. 16, 23, 28, 34, Style laterally. 17, 24, 26, 31, Aedeagus ventrally. 18, 22, 29, Pygofer laterally, apical portion. 19, 25, 27, 32, Aedeagus laterally. 20, 21, 30, 35, Plate ventrally. 33, Female 7th sternum. 36, Pygofer laterally.

slender, bearing a pair of apical processes which extend caudally ½ length of shaft. Pygofer broadly rounded apically with a rounded, short, fingerlike process extending at dorsocaudal margin. A hidden portion protrudes beneath the caudal margin which is also broadly rounded and bears a similar apical process at its ventrocaudal margin.

Holotype.—&, Belém Mocambo, Pará, Brazil, March 17, 1977, M. F. Torror coll. Holotype in Museu de Zoologia da Universidade de São Paulo,

Brazil.

Remarks.—Gypona mocamba is placed in the subgenus Marganalana but is not closely related to any described species. The shape of the style and the apex of the pygofer are not similar to any described species of Gypona.

# Gypona (Marganalana) platona DeLong, New Species Figs. 26–30

Description.—Length of male 9 mm, female unknown. Crown broadly rounded, margin thin, more than twice as wide at base between eyes as median length. Color, one specimen uniformly green, the other uniformly brown. Each has a small, round, black spot on each side of the pronotum at ½ its length.

Male genital plates  $4\times$  as long as width at middle, apices rounded. Style broadened and rounded apically, bearing a long curved apical spine on ventral margin. Aedeagal shaft long, slender, with a pair of apical processes, ½ length of shaft, extending basally. Pygofer with a conspicuous notch at middle of caudal margin.

Holotype.—&, Porto Platon, Amapá, Brazil, July 20, 1961, J. and B. Bechyne colls. Holotype in Museu de Zoologia da Universidade de São Paulo, Brazil.

Remarks.—Gypona platona is placed in the subgenus Marganalana, is most closely related to G. axena DeLong and Freytag, and can be separated by the narrow curved apex of the style.

### Gypona subgenus Carnoseta DeLong, New Subgenus

Description.—Crown produced and broadly rounded, median length slightly greater than width at base between eyes. Ocelli at ½ length of crown, closer to median line than to eyes. Crown slightly concave with apex curved upwardly.

Remarks.—In general appearance G. colomella, n. sp., resembles a species of *Prairiana* Ball but the aedeagus has no paraphyses and the genital structures in general resemble those of Gypona.

Type-species of subgenus.—Gypona (Carnoseta) colomella, n. sp.

### Gypona (Carnoseta) colomella DeLong, New Species Figs. 31–36

Description.—Length of male 6 mm, female 7 mm. Crown produced and broadly rounded at apex, more than ½ as long at middle as wide at base between eyes. Crown slightly concave with apex curved upward. Ocelli ½ length of crown, closer to median line than to eyes. Pronotum yellow tinged with brown. Scutellum pale yellowish. Forewings variable in coloration normally yellow with clavus pale or dark brown. With two round black spots along clavus on corium.

Female 7th sternum with posterior margin angularly excavated on each side of a broad median tooth, ¼ width of segment which is produced beyond length of lateral angles and is notched at middle forming 2 minute rounded lobes.

Male genital plates elongate, narrow,  $4\times$  as long as wide at middle, apices rounded. Style enlarged at  $\frac{2}{3}$  its length, apical  $\frac{1}{3}$  curved dorsally and gradually tapered to a slender pointed apex. Aedeagal shaft broadened in ventral aspect, narrowed apically with blunt apex and bearing 2 pairs of processes. A pair of apical processes arise on each side at apex and extend  $\frac{1}{3}$  distance to base. A pair of subapical processes arise at  $\frac{2}{3}$  length of shaft and extend basally to middle of shaft. Pygofer broadly rounded apically.

Types.—Holotype 3, Tunga, Colombia Bay, Atena, Colombia, V-30-96. Paratypes: 1 3 and 1 9, same data as for holotype. Holotype and paratypes in DeLong Collection, The Ohio State University.

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